

Appl. No. 10/043,832  
Atty. Docket No. 8835  
Amdt. dated August 7, 2003  
Reply to Office Action of May 7, 2003  
Customer No. 27752

### REMARKS

#### Rejection Under 35 USC 112, Second Paragraph

The Office Action rejects claim 9, 14-17, 20, and 22 under 35 USC §112 Second Paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention.

Claims 9, 14-17, 20 and 22 have been amended to overcome this rejection. Claims 9, 14-17, and 20 have been amended to clarify the determination of the claimed angle. Claim 22 has been amended to remove any appearance of dependence.

#### Rejection Under 35 USC 103(a)

Claims 1, 2, 4-7, 11-13, 17-19, 21 and 22 have been rejected under 35 USC 103(a) as being unpatentable over the admitted prior art of Figures 12 and 13. Applicants respectfully traverse this rejection.

Figures 12 and 13 do not teach or suggest all of Applicants' claim limitations and therefore, do not establish a *prima facie* case of obviousness (see MPEP 2143.03). Specifically the figures do not teach or suggest that one bank of air jets is offset from a second bank of air jets. Figure 13 illustrates two banks of air jets that are aligned one with the other. No motivation to offset the first set from the second set is provided. The Office Action states that it would have been obvious to one of skill in the art to offset one of the banks from the other for optimum cleaning effects. Nothing in the cited figures teaches or suggests that offsetting one bank will yield an optimum cleaning effect. This is suggested only by the Applicants' specification. It is impermissible for the Office to use the Applicants' invention as the basis for modifying the prior art.

The figures also do not teach or suggest that the local velocity of the vacuum within a substantial portion of the head and plenum is greater than about 2.0 m/s for a cleaning droplet size of 450  $\mu$ m at a vacuum flow rate of between at least about 66 SCFM and about 168 SCFM as set forth in currently amended claim 18. The data of table 1 for the prior art apparatus of Figures 12 and 13 shows that the local velocity is not greater than the conveying velocity of the droplets in

Appl. No. 10/043,832  
Atty. Docket No. 8835  
Amdt. dated August 7, 2003  
Reply to Office Action of May 7, 2003  
Customer No. 27752

this vacuum range for vacuum flow rates in this range. Achieving this result is not a matter of routine experimentation but is instead a result of the unique internal features of the claimed invention.

The figures also do not teach or suggest that the local velocity of the vacuum in the head and plenum of the cleaning apparatus is greater than the conveying velocity of the largest droplet if the vacuum is between at least about 66 SCFM and about 168 SCFM as set forth in currently amended claim 22. As shown in table 1, the prior art apparatus of the figures drips at vacuum levels in this range and therefore does not achieve the claimed limitation.

The Office Action implies that the lower curved surface of the apparatus of Figure 12 teaches or suggests the interior aerodynamic surface of claims 5 – 7. Applicants respectfully submit that the identified surface is not an interior surface and does not teach or suggest the claimed limitation.

For the reasons set forth above, applicants submit that the requirements for establishing a prima facie case of obviousness under 35 USC §103(a) are not satisfied by the prior art apparatus of figures 12 and 13. Applicants therefore request that the rejection under 35 USC §103(a) be reconsidered and withdrawn.

The Office Action has rejected various dependent claims under 35 USC §103(a) over the combination of Figures 12 and 13 with either Flynn et al. US 4,872,920, or Olbrant et al. US 3,775,806. Applicants submit that the independent claims of the invention should be allowed in light of the current amendments and the above remarks. The dependent claims should therefore also be allowed. The deficiencies of Figures 12 and 13 with respect to the independent claims are not cured by the combination of the figures with either reference.

Specification:

The Office Action objects to two informalities in the disclosure. Applicants have amended the disclosure to overcome the objections to the specification raised by the Office Action.

Drawings:

The Office Action objects to the drawings as not showing every claimed feature of the invention. Specifically, the Office Action states that a new drawing showing a flexible plate and a

Appl. No. 10/043,832  
Atty. Docket No. 8835  
Amdt. dated August 7, 2003  
Reply to Office Action of May 7, 2003  
Customer No. 27752

plate cylinder more clearly must be submitted. Applicants submit that a flexible plate and plate cylinder are not claimed. Applicants request a clarification as to this objection to the drawings.

Conclusion

In light of the above remarks, it is requested that the Examiner reconsider and withdraw the rejections under 35 USC §§ 112 and 103. Early and favorable action in the case is respectfully requested.

Respectfully submitted,

For: Donn Nathan Boatman et al.

By: 

David K. Mattheis  
Attorney for Applicant(s)  
Registration No. 48,683  
(513) 634-7419

August 7, 2003  
Customer No. 27752

OFFICIAL

FAX RECEIVED

AUG 7 2003

TECHNOLOGY CENTER 2800